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NATIONAL AGRICULTURAL COLLEGE



SUMMER 1957

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NATIONAL AGRICULTURAL COLLEGE

DOYLESTOWN, BUCKS COUNTY, PENNSYLVANIA

VOL. LIV

SUMMER, 1957

No. 4

Let the farmer for evermore be honored in his calling, for they who labor in the earth are the chosen people of God.

THOMAS JEFFERSON

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ON THE COVER

*Farm Number Three, the Scene of Great Activity
for the Animal Husbandry Men*

Staff

CHARLES KLEIN

EDITORS-IN-CHIEF

FRANK WOJTOWICZ, JR.

Associate Editors — Hunt Ashby and Joe Shinn

Sports — Walt Kendzierski, Tom Watson

Business Staff —

Business Manager . . . Philip Winkie
Advertising Al Dolinsky, Malcolm McCarty, William Orem.
Typing Dick Salisbury, Norman Dornsin, Joseph R. Kuhta.
Art Lew Seidenberg, Walt Kiendzieski.

Contributing Staff — Ben Snavely, Alan Carp, Gil Finkel, Tom Dall, Hunt Ashby, Richard Schadt, Joe Siatkowski, Joe Sardone, Dave Bogwokly, David Kantner.

Photo Staff — Santiago Fonseca, Tom Brennan, Alan Dolinsky.

Photo Credits — Maddox Studio, John Lawrence & U.S.D.A.

Faculty Advisors — R. D. Forbes, Daniel Miller, Donald M. Meyer.

The Gleaner is published throughout the school year by the student body of the National Agricultural College. Entered as second class matter at the Post Office at Doylestown, Pa. Subscription rate—\$1.50 per year.

EXODUS.....

I was never really able to figure my mother's moods out. She's from northern Europe—Lithuania—and this would explain a lot to anybody that is a student of the immigrants from northern Europe. Unfortunately, I am no such student, and as I said, I have never been able to figure her moods out. Oh, I knew that certain things would make her mad; like pushing the sofa up against the living room wall, so that when my uncle came in and sat down, and on getting bored of the conversation allowed his head to bob back, asleep, leaving when he arose, a small dark spot on the wallpaper. There were many such spots on the living room wall, for inevitably, the sofa wound up at the end of the evening against the wall. There was no rug under it, and whenever anybody dropped down into it, it slid back an inch. And so an inch at a time, it meandered restlessly to its place by the wall.

I know that made her mad, and I know several things that made her glad. That isn't what I mean, there was a certain mood she had, wherein she would tell us (my older brother and myself) about her life in Europe. I liked to hear those stories; about my Grand parents, and how they lived. Never a bonus for being a "good boy;" never because an old friend dropped in for a visit, or died; they just seemed to come out, never frequently enough it seemed to me. Yet there was nothing we could ever do to increase the periodicity. We never paid attention more closely; no preacher ever had a more mindful audience, no professor more ardent students than my mother had in us.

I liked best the story of the Exodus, or perhaps more correctly the escape, from the small town a few miles from Vilna, the Capital.

My Uncle, the one whose head-spots dot out living room walls, has been in America for several years, having been preceded by three brothers, and a sister, all older than himself. The next in line to come across was his little sister, sixteen year old Gittle—the closest American equivalent would probably be Gertrude. My Uncle took his savings of about \$400, and decided to go after her, rather than have her come over by herself. My mother knew nothing of this; she knew only that someday she would get to America. How, and when, she

never bothered to think about—she knew only that one day she would be here.

Communications across the Atlantic, in those days, were slow, and at best, very uncertain. My uncle couldn't be bothered. After he had decided to go, he took the first ship to Europe, tourist class. The time he chose to go was a fortunate one; there was a lull in the skirmishes between the Russians and the Germans, and the Germans and the Poles. Passage in those days was rough even for the rich; for the tourist it was miserable. The cabins were large, resembling airplane hangers. The tourist slept dormitory style. There were always too many people for a given area of deck space, the bunks were too low and too high, depending on whether you slept on top or bottom, the food too cold, and never enough for a working man, used to European farm-type cooking. In three weeks, he arrived at Le Havre.

The farmers in the villages around Vilna were restless. It was already a year since the Germans had liberated them, and their livestock from the Russians. In truth, they were liberated, and welcomed the German soldiers. The Germans are a clean people, and the German soldier brought with him his traditional cleanliness. Toilet facilities were built, and the farmers forced to use them. The town baths were opened weekly, rather monthly. Army medical facilities were at the public service. All of this was too good to be true. My mother decided to leave, while she was still able, and before the Poles decided that the Germans had been there long enough.

She had some money, very little, saved from before the liberation. Her father had given her a few coins every week to give to the girl who milked the cows on the sabbath. The girl came from a less religious family, and one day realized that surely if she didn't milk the cows, the cows wouldn't be milked. She demanded the money, and also part of the milk. She should have known my mother better. She got neither. My mother milked the cows while my Grandfather prayed, and saved the pennies, she knew not for what. Now the time for leaving home was at hand, and so she left. To go where? Since the Germans were in occupation, there was really only one place to go.

A gregarious type, as the Northern European farmer is, it was only a short time before almost everyone on the train knew her, and only a very short time later that they knew where she was from, where she was going, and how she intended to get there. The listeners were sincerely interested, and would have helped, if they could. They too, however, were going, or coming from someplace worse, trying to get to someplace better. Besides, they would ask, what could a farmer do? A farmer could only wait and see. And so, they all listened, and then told their story, and then waited.

The line ended at a small town on the border. Another train was supposed to be there to meet them. Train connections in those days were even worse than they are today; it would not be there for several days perhaps a week. It had developed engine trouble when a bomb exploded in the fire box. These things were more or less common, and almost expected at an international border. There being no other choice, they settled down, to wait for the connecting train.

In the wanderings about the small rail-road town, my mother chanced to talk with a woman who made it a practice to meet the trains as they arrived, perhaps hoping that a relative would someday come to visit her. She talked to the passengers, and got her news in that fashion, in the United States she would perhaps be called a gossip. I would prefer to call her "interested." She certainly shared her news, with anyone that would listen. My mother listened.

She talked of many things; of the Germans, the Poles, and people on the train. She talked of a young man, spending American money, who undoubtedly came by it dishonestly because he bore no American accent. She talked of how he spent his money ("as if it were homemade") and where he was going. He was on his way to Vilna to see his sister. My mother pressed the story—she knew most of the people in her locale, and could think of no one who had a crook for a brother. It was my Uncle, gone to Vilna the same day that my mother had arrived, and indeed on the same train.

There was no telegraph; it had long since been torn down in the fighting.

(continued on page 18)

EDITORIAL COMMENTS....

THE SUMMER months are upon us as the last issue of the *Gleaner* goes to press for the college year 1956-57. Looking back we find that the magazine has had a rather trying time in relation to meeting publication dates. Usually, the summer issue is published before the end of classes in May, but due to circumstances beyond the student control, we are a little late this year. However, the entire staff working on the magazine hopes that the enjoyment obtained from this issue will be as great, and perhaps greater than from past issues.

While planning the fourth issue, a question was raised by one of the staff members as to how much the average student at N. A. C. knows about the workings of the *Gleaner*. For instance, how do we obtain and develop articles; who checks and criticizes the issue layout before it is sent to the printers; and lastly, how is the magazine paid for, and does it pay for itself?

Each issue that comes out has a format; by a format is meant a planned set of articles that will appear in the issue. The format is determined by the editorial board of the magazine with recommendations heard from the entire staff of the *Gleaner*. Once the format has been determined, assignments are drawn up and handed to students *willing to do the work*.

Here is where our trouble begins. There are generally two types of students that will write and work for the magazine.

The first student is the credit-getter; he wants to make up his elective credits. Sometimes, it is far to say this individual is a very conscientious worker, loyal to the magazine.

The second person is a fellow who works on the magazine just because he likes to write; call this person what you like, but he is the backbone of the magazine. He is the type of guy that one can call on to write a "rush" article, and know that the manuscript

will be faithfully delivered. He can be confronted any time of the day to do a reasonable task, and no "Hard-Luck" stories will be heard. Without these fellows on the staff, N. A. C. would not see four issues of the *Gleaner* published a year.

Once the articles are written, the most time-consuming job in the entire publication process, they are proof-read by the editors and members of the staff. Mistakes are brought to light, paragraphs rearranged, commas taken out, and triteness side-tracked. After they have been proof-read, the articles are sent to the typists, who produce the "finished" product. Here again, precious time is absorbed, because the scholastic load carried by the average student does not permit him to spend as much time on an extra-curricular activity as he would like.

After perhaps a week's time, the newly-typed manuscripts are in the hands of the editors, who give them a second check for correctness and clarity.

The next step in the evolution of an issue is to have the articles reviewed by Mr. Forbes, who is one of the *Gleaner* faculty advisors.

Of the faculty advisors, he carries the most important job, for he criti-

cally appraises our English. The assistance that Mr. Forbes has given the magazine is not generally known to the student on campus. He has devoted much time to it, and has been instrumental in bringing the *Gleaner* up to the level that it commands today.

Dean Meyer is next in line to examine the articles. He makes sure that the manuscripts are written in a fashion that will not bring dishonor or criticism upon the college, or any individual in it. He must see that a high standard is maintained by all articles appearing in each issue.

As editors, we now get the articles bearing red pencil marks; signatures of various officials of the college; and bent corner pages! After we unsnarl the red-tape that encircles the articles, the printers receive the manuscripts and initiate the process which will terminate in the published magazine being delivered to you, the student.

This, basically, is the way each issue you get is put together. The *Gleaner* is paid for by the money obtained from "ads" placed in the magazine, and publication fees paid by the student. Any deficit by the college.

A lot of comments have been made on the *Gleaner*. Some commentators have said that the "management is

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ROSES

by Tom Dall '58

ROSES are one of the most favored and popular flowers in America today. They have been rightly named the "Queen of Flowers" — the Number 1 flower grown today. They enjoy wide popularity because there is considerable diversity and contrast among the species. There is a form to suit every garden and every gardener.

Some of the outstanding Hybrid Teas include Peace (yellow with pink blush), Chrysler Imperial (dark red), Mojave (orange), and Tiffany (clear pink).

The Floribundas are a relatively new class of roses which were first introduced less than 20 years ago. This class exhibits highly desirable garden qualities including hardiness, compact shrubby growth, long blooming period, and the production of thick clusters of moderately to quite double blossoms of Hybrid Tea size. The plants are vigorous and easy to grow, the flowers look well on them and are also good for cutting, and the color range thus far available is generous and beautiful. Among the outstanding Floribundas are Jiminy Cricket (tangerine-red), Ma Perkins (pink), Fashion (red), and the Pinocchio series (wide color range).

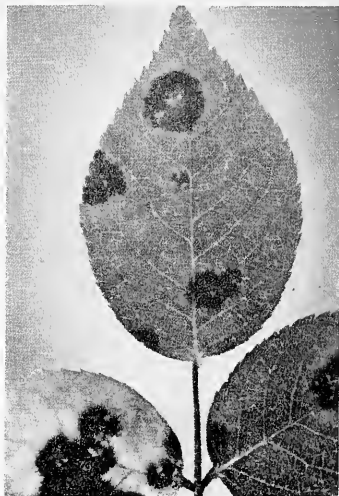
In addition to the two foregoing there are also numerous other classes such as the "old-fashioned" roses, ramblers, climbers, and the new Grandiflora class, which all enjoy considerable popularity and are of use by the landscapist.

The culture of roses is relatively simple. They should be given the best soil possible (for good roses cannot be produced on poor soil). A good rule to go by: "Any soil which will produce good vegetables will produce good roses." They need an abundance of water, but the ground must not be soggy. They like plenty of fresh air and regular feeding with any good rose food. Chose a location which gets a minimum of 6 hours of sun daily and has some protection from strong winter winds.

Seasonal care consists mainly of keeping the beds cultivated at all times. Water when the weather is dry, soaking the ground deeply and cultivating the surface as soon as it dries. Roses should be pruned annually, preferably in the early spring to check canker infections. Roses may be pruned lightly one year (remove weak canes and cut main canes back to 18 inches) and pruned heavily (remove

all secondary growth and cut permanent canes back to 6 inches) the succeeding year. This system will produce an abundance of roses one year and fewer, but larger blooms the next year. This method would also produce an excellent branching system.

There are several insects and diseases which attack roses, but if a regular control program is followed, there should be little trouble. The only thing to remember is to care for them regularly, not spasmodically.



Black spot disease on rose leaflets. As these spots increase in size they often run together and cover the entire leaflet. Severely infected leaves fall from the plant. When black spot is unchecked it may almost defoliate the rose plant.

Black spot of roses is perhaps the most widely distributed of all rose diseases, practically all varieties being

(continued on page 18)



Charlotte Armstrong, a red-flowered hybrid tea.

The most popular species grown today is the Hybrid Tea. The flowers of the Hybrid Teas vary from thin, few-petaled forms to large, full flowers with symmetrical centers. Some have the "old fashioned" fragrance, some have tea and fruit-like scents, while others are practically without perfume. All colors exist except the true blues and violets.

The outstanding merits of the H. T. are that they combine the ever-blooming quality of the Teas with the hardiness of the Hybrid Perpetuals, and have added to the color range of both.

NEW FACES ON CAMPUS

by *Hunt Ashby '58*

Richard Schadt '58

THE GLEANER spotlight proudly focuses on one of the latest comers to the N. A. C. campus — Mr. Richard Bateman, friendly and popular instructor in Ornamental Horticulture.

Mr. Bateman, who is a native of



MR. RICHARD BATEMAN

Pennsylvania, was born on February 23, 1928, near Abington. Throughout his early boyhood, Mr. Bateman traveled a great deal with his parents along the eastern seaboard, and lived in many interesting cities, including Washington, D. C. The Bateman family finally terminated its travels and returned to Philadelphia, Pa. There Richard began his high school days by attending Central High. In his sophomore year his parents moved once again and he was transferred to Whitpain High School, near Ambler, Pa. Mr. Bateman remained at Whitpain until his graduation, after which he enrolled in Pennsylvania State University, and majored in ornamental horticulture under Professor Meale. After attending Penn State for one and one-half years, he was called to active duty in the United States Marine Corps. In the Corps, Mr. Bateman was advanced to the position of Non-Commissioned Officer in charge of the Forestry Department at the Cherrypoint Naval Air Station, North Carolina.

Once out of the Corps with an honorable discharge, he found a position at the Southampton Nurseries in the retail and design departments. Although he remained at the nursery for two and one-half years, he did not particularly care for this type of work and consequently chose Washington Crossing State Park as his next position. There he was named assistant superintendent over forestry and water at the park.

Soon after his discharge from the Marine Corps in 1953, Mr. Bateman acquired another interesting position — head of a household, for he married at that time.

Meanwhile, in the midst of all these endeavors, he bought a fifty-four acre farm in New Britain, Pa. Using the land that he acquired through this purchase, he and his father-in-law, Mr. Melvin Whitworth, went into a nursery business partnership that is presently still in existence.

In the summer of '56, Mr. Bateman was offered a job at N. A. C. which he immediately accepted. Today, when asked what his plans for the N. A. C. campus are, he described them as "improving the ornamental department and also completely landscaping the campus."

Looking into the future, we understand that he definitely intends to continue his education and ultimately receive his degree. At the New Britain Nursery he would like to develop a flourishing wholesale business.

N. A. C. welcomes you, Mr. R. Bateman, and would like to wish you the best of luck in all your future plans.

ANOTHER new face to the N. A. C. campus this year is that of Dr. Jonas W. Bucher. Dr. Bucher, who was born and spent his boyhood in the rich agricultural Lancaster County, Pennsylvania, comes to us from Temple University.

Dr. Bucher first attended Millersville State Teachers College where he was president of his senior class, and a member of the Rex Club. This was

a club of the past presidents of the various societies.

Later he attended Ursinus College. From there he went to the University of Pennsylvania where he received his Ph. D. in 1939. There he was a member of the Kappa Phi Kappa, and Phi Delta Kappa fraternities.

Dr. Bucher then taught and did administrative work at Temple University. He is a member of the Temple University Chapter of American Association of University Professors.

Dr. and Mrs. Bucher reside in Glenside, a Philadelphia suburb. He has three sons: Dr. Robert Bucher, who is a member of the faculty of the Temple University Medical School and is on the surgical staff of the hospital; Dr. John H. Bucher, a psychiatrist, who is medical director of the Blue Hill Retreat Sanitarium at Sunbury,



DR. JONAS W. BUCHER

Pennsylvania; and Mr. William R. Bucher, an insurance underwriter for the Insurance Company of American at its Detroit office.

In speaking of N. A. C., Dr. Bucher says, "I began work here in October of last year, and I am impressed with possible future development of the college."

Consider That Farm Woodland

by R. D. Forbes

OF THE million acres which the 1950 Census of Agriculture reported were in farms in the six New England States, and in Delaware, Maryland, New Jersey, Pennsylvania, and West Virginia, 34 percent were wooded. In these States 470,000 farmers, or 61 percent of all farmers, were owners of commercially valuable woodland, according to the Timber Resources Review of the Forest Service, United States Department of Agriculture, published in 1955.

Any crop occupying $\frac{1}{3}$ of the land owned by farmers in the northeastern United States is worthy of consideration here at National Agricultural College. Today, largely because it is nearly 100 percent a "volunteer" crop — sprung up without any "by-your-leave" of the farmer, and maturing with scarcely more attention than protection against fires and grazing —



A seedling of black oak comes up in an opening created by cutting the mature trees.



A 21-inch (diameter at breast height) black oak seed tree. The two beeches left standing behind it protect it from windfall.

it is an unappreciated crop. So let's take a look at it. The same advances in technology which in the last 50 years have raised agriculture from an art to a science, and incidentally have developed a school into a college on our campus, have combined with economic changes to increase its potentialities.

I believe that no crop on American farms has risen more rapidly, or more permanently, in value than sawtimber. When I graduated from the Yale forest school less than 50 years ago, if a forest owner could obtain \$10 per 1000 board feet on the stump for any species of tree, except perhaps white oak, he was fortunate. Five dollars per 1000 feet would have been nearer the average value in the Northeast. In the last 15 years, as an consulting forester, I have sold for my forest-owning clients oak, ash, and yellow (tulip)

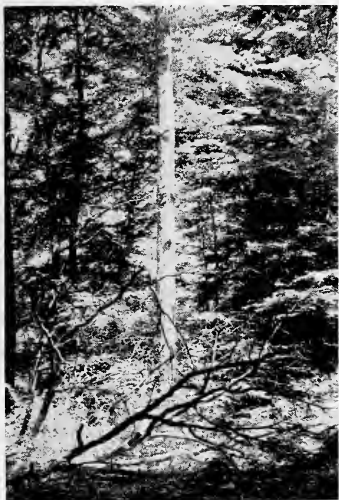
poplar stumpage at \$30 to \$40 per 1000 board feet, and no species of native trees at less than \$11.

Note that these figures are for stumage, that is, for trees as they stand in the owner's woods. Raising them did not cost the farmer-owner a cent. He had not plowed or harrowed the ground; he hadn't removed a rock or boulder from it. He had not seeded or planted the trees. He had applied never a pound of fertilizer to his tree crop, nor had he dusted it against insects or disease. At the very most, he had protected his woodland against fire, and (if it were of broad-leaved trees) fenced it against stock. As for taxes, he had as a general rule paid scarcely more on them on his woodland than he would have paid on the land if the trees were not there. What he received when he sold his standing trees was therefore practically net. In growing

farmer he had to milk his cows, harvest his grain, and pick his fruit that very day, or very month, regardless of the current price for milk, wheat, or apples. But if the local sawmill, or the perhaps distant basket factory, temporarily had all the logs it needed and had lowered its price for stumpage,

remove the mature trees not needed to provide seed, and leave partly-grown trees for future harvests.

Experience in Europe, where forestry has long been an intensely practical business, has shown that in the interval necessary to mature a sawtimber crop an approximately equal vol-



A 20-inch white oak seed tree. In foreground branches of white oaks felled two years ago have already begun to rot.

the tree crop he had had no labor problems; he was not concerned if prices for lime, fertilizers, seed, and machinery had all sky-rocketed. His trees — barring "Hazel" and her sister Furies — continued their serene growth.

Furthermore, when his tree crop matured, the owner did not have to sell it at once, on pain of losing it. As a



The sawlog cutting leaves pole-size trees for further growth.

the timber owner could delay selling his timber until prices recovered — as they invariably did. If his woods were thrifty, next year he had about four percent greater volume to sell, on the recovered market, than the year before.

So far I have written about selling the wood crop only at maturity. In the Northeast it takes trees from 40 to 60 years to reach sawtimber size (10 inches in diameter, 4½ feet above ground, for needle-leaved species, and 12 inches for broad-leaved species). How can anyone wait 40 to 60 years for his crop to mature? The answer is: he does not have to wait, if, as in most natural woods not recently cut-over, some of his trees are already of those ages, and saplings and seedlings of younger age are present. Today's lumbermen are perfectly willing to cut mature trees only, leaving the younger trees to grow and provide another cut in 10 or 15 years. Forestry in the Northeast usually takes the form of periodic cuttings of this sort, which

une of wood may be harvested from small trees that would otherwise be gradually crowded out of the stand by the relatively small number of sawtimber trees. "Cleaning" and "thinning" the woodland salvages these victims of natural competition for light, soil moisture, and soil nutrients. These improvement cuttings can be made in many farm woods in the owner's spare time, or with farm labor which is seasonally unemployed. If pulp and paper mills, or composition-roofing plants, are not too far distant, or if there are other local industries using small trees, these operations will pay at least wages, and may return a margin of \$2 to \$5 a cord for stumpage.

These are generalities. If you ask for proof of the dollars-and-cents values of the farm woods, I recommend your studying Bulletin 595 of the University of Vermont and State Agricultural College, Burlington, Vt. It is entitled "Marketing Forest Products from Small Woodland Areas in the

(continued on page 18)

The Battle Against

Data and Photography by the



Milk ring test samples to detect brucellosis-infected herds are collected at a central dairy. The milk is dipped from each can. Samples from 5 to 12 cows are pooled in one vial, recorded as to source, and sent to a field or central laboratory for analysis.

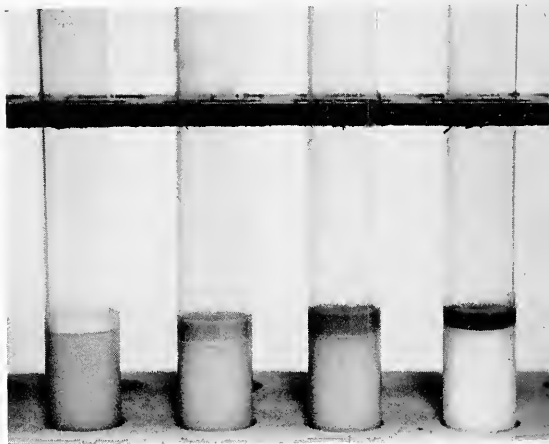


Veterinarian using a branding iron marks brucellosis reactors with a large "B" also applies a special ear tag. Such animals should be kept apart from healthy cattle and removed for slaughter as promptly as possible.

ANOTHER round has been won in the battle to wipe out brucellosis among our nation's cattle. Since 1954, when the U. S. Department of Agriculture and the states began an all-out eradication program, incidence of this contagious disease has been reduced from 2.6 percent to less than 2 percent of our cattle. In 1935, when eradication measures were first begun on a national scale, 11.5 percent of U. S. cattle had the disease.

Six states — Maine, New Hampshire, North Carolina, Washington, Wisconsin, and Delaware now have less than 1 percent of infected cattle, thus achieving the status of "modified certified brucellosis-free". As of May 1 a total of 441 counties in 26 other states and Puerto Rico have also earned this certification — an important milestone in the eradication of the disease.

Despite this progress, brucellosis (also known as Bang's disease or infec-



Blue cream ring above white milk at right is an indication of *Brucella* infection in the herd. Normal cream ring at left shows negative reaction. Intermediate variations in the two center tubes indicate different degrees of infection. Animals in ring suspicious herds should be blood tested promptly.

BRUCELLOSIS

United States Dept. of Agriculture

tious abortion) still accounts for losses of about \$50 million per year in unborn or stillborn calves, reduced milk output, and cost of replacing infected stock. The disease organism that causes brucellosis is also a hazard to humans, who may get sick with undulant fever from contact with diseased animals or animal products.

Continued and relentless effort by everyone concerned is needed to hold the gains already made against this costly disease and to make further progress. There can be no standing still, if the goal of complete eradication is to be reached.

Brucellosis fighters now have more effective weapons than ever before for doing their job successfully. These are: (1) the BRT or milk and cream ring test; (2) the blood-serum agglutination test; (3) stain 19 brucella vaccine for calves; (4) removal of diseased animals; (5) Federal control of interstate movement of cattle.

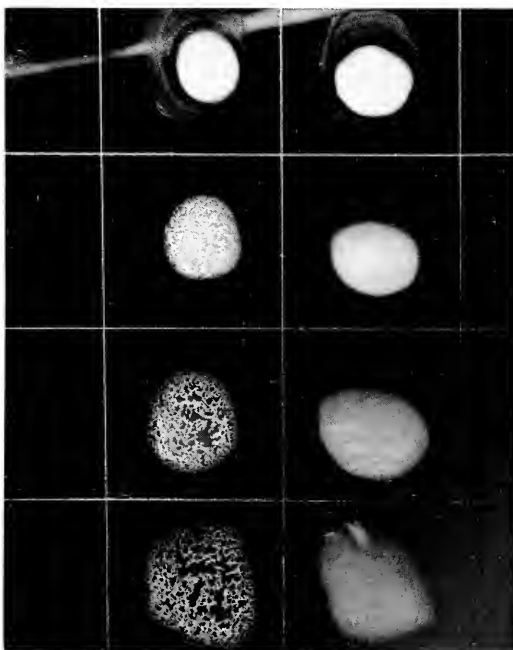


Vaccinating calves at proper ages with Strain 19 Brucella vaccine provides serviceable resistance to average field exposure to brucellosis. However, vaccinated animals that are heavily exposed to brucellosis may get the disease.



Trucks and other vehicles in which brucellosis reactors are transported must be thoroughly cleaned and disinfected. Here a truck which has delivered a load of reactors to a public stockyard is being disinfected under the supervision of a Federal inspector.

Here is what the end result of a blood-agglutination test by the rapid plate method looks like. The mottled drops in the upper squares show various degrees of reaction to the test for brucellosis.



What Is Landscape Design?

by Joe Siatlonski '60

THE WORD "design" is commonly used in two different ways. We say "design and construction" when we mean to differentiate between what it was decided to do, and what was actually done. We say "good practically, but bad in design" when we mean, for instance, that a building serves its purpose as shelter, but does not serve its purpose of giving visual pleasure. This use of design as meaning only esthetic design is confusing, for no sharp line can be drawn in most actual work between esthetic and economic design. The word "design" is used as meaning the art or act of determining the character of an object so that it shall serve any predetermined purpose or purposes; and the term "landscape design" is used as meaning design in landscape materials.

As landscape architecture is a fine art, all of its works must be designed to some extent to be pleasing in appearance, but the great majority of such works are intended to serve some additional purpose of the user. Landscape design usually has an economic as well as an esthetic aspect. The economic considerations affecting the design of landscape are best set forth by naming the important types of designed areas organized according to use, such as the garden, the private estate, the park. The general esthetic principles underlying landscape design are fundamentally the same as those of design in all the fine arts, but they differ in that they are applied to the materials or elements of design with which landscape architecture deals; namely, ground forms, vegetation, and structures in their relation to landscape.

In landscape architecture we are concerned almost exclusively with those effects which are made on the mind through our sense of sight, and indirectly through its cooperating sense, touch, including feelings of muscular activity, which does so much to interpret our visual impressions. The sensations received through taste, smell, and hearing, though also to be considered, are not often so important

in landscape design.

"A garden, geometric in shape, enclosed and laid out with regularity according to established methods of classic design is called a formal garden." In a formal garden, one feels the presence of a studied scheme. It serves a valuable purpose by creating a natural transition between the house and the informal landscape, which satisfies the eye.

In the formal design the different areas in the garden — the different flower beds, walks, etc. — have definite formal outlines. Definitely clipped and edged sod, and perhaps stone or brick edgings, are used in order that the forms in the garden may be more recognizable and definite. The objects which are most important in the garden, to which the interest is led by the other features in the design, must be more definite still. One is likely to choose for these positions architectural or sculptural objects, because it would be very rare that a tree or an evergreen shrub, even a clipped tree or shrub, would be important enough, formal enough, to dominate the rest of the design.

In the formal garden there is less possibility of use of architectural and sculptural objects. The informal garden is made of informal materials such as trees, shrubs, and flowering plants. We are still obliged to get unity by repetition, sequence, and balance. One's attention will at first fall on the beauty of the objects themselves which make up the design — the individual plants.

In landscape design we have different tastes and styles. Taste is involved in the appreciation of beauty; style, in the creation of beauty. The artist must have the power to appreciate, to perceive organization; but he must also have the power to express, to put his idea into physical form (speech, action, written word, work of sculpture, architecture, etc.), so that someone else can perceive with pleasure the organization on which his work of art is based.

Making a serviceable landscape plan does not require artistic ability. All one needs is the right equipment for measuring and drawing, and the mathematical intelligence to uniformly reduce various sized objects to a fraction of their size.

The equipment needed to make a good landscape plan includes a drawing board, "T"-square, two triangles (45° and 60°), a protractor, compass, tape measure, scale or ruler, pencil, eraser, scotch tape, and tracing paper.

To illustrate the location and different types of flowers, trees, and shrubs, we use certain symbols which have a specific meaning. These symbols are actually a gardener's shorthand.

Field notes are almost essential for a good design. This task is divided into two parts. The first consists of taking the field notes in the form of rough sketches as well as dimensions and actual description. The second step is transferring the notes to drawing paper in proper scale and proper relation to each other. The result is comparable to a well-labeled photograph taken from directly above the site. It is important to have this top view before one starts working on the overall landscape design of the property.

Generally speaking, there are three types of sketching used in designing. The first type is the elevation drawing; the second is the isometric projection; and the third is the perspective.

An elevation drawing is one that shows the object, as seen from directly in front. It shows height and width only and everything is drawn to scale.

The isometric drawing is also drawn to scale but, besides showing length and width, it gives the illusion of the third dimension.

The perspective drawing requires a certain amount of artistic ability and goes into more detail than the elevation and isometric drawings.

The natural forms of ground, rock, and water have value as elements in landscape composition in that they

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STUDENT FROM A FOREIGN LAND

by Joseph Sardone '58

TONY CABRALES, born in San Salvador, South America, in the year 1936 has been subjected to many travels in his young life. His father is associated with the El Salvador Government in the diplomatic services and consequently must do much traveling.

At the age of 6 months, Tony and his parents came to New York City where they stayed until Tony was 3 years old.

New Orleans, Louisiana, was to be the next stop for the Cabrales family. In New Orleans Tony grew up and received his elementary and high school education. While at St. Martin's High, where he was accepted on an athletic scholarship, Tony became recognized for his athletic abilities. He has always had a yen for sports: football, track, and swimming, but basketball he considers his favorite.

In the 4 years at St. Martin's, he was chosen to play with the All-Metropolitan Area Selection Team, which incidentally is quite an honor. In Tony's last two years at high school, this team won the Metropolitan Championship of New Orleans. The team was chosen to play in one of the greatest tournaments of Louisiana, namely, the Golden Metal Tournament. The team

placed third in his Senior year, and Tony was awarded the place of second most valuable player of the tournament.

In his last years of high school, El Salvador recognized Tony's specta-

cular playing ability and sent for him to play with the National Olympic Team in El Salvador. He also took part in 3 Central American games.

Every summer since he was a boy, Tony goes back to El Salvador where he would spend the time on his family's farms. Since this is almost entirely an agricultural country, Tony's interests ran toward agriculture.

In 1955 Tony became a student here at the National Agricultural College after hearing about the college from a friend in South America. He made his decision to enroll at N. A. C. because of the practical agricultural subjects which are taught.

Tony has a certain mien about him; one can easily pick him out of a crowd. He is an gracious friend to all. When our gym still stood, many was the time one could see him assiduously practicing his beloved sport—basketball.

Not only is he a good sportsman, but he "holds his own" among the better students of the class of '58. We are all confident that Tony will succeed in his own way in whatever project he undertakes, and will make another man that N. A. C. can be proud in saying that "he attended our college."



TONY CABRALES



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H I J A C K E D



What's all the hurry?"

"Just brought a new textbook, and I'm trying to get to class before the next edition comes out."

And then there was the coed who was so thin that she swallowed an olive and twelve men left town.

A canny Scot was engaged in an argument with the conductor as to whether the fare was to be five cents or ten cents. Finally, the disgusted conductor picked up the Scot's suitcase and tossed it off the train, just as they were crossing a long bridge. It landed with a mighty splash.

"Hoot mon," cried the Scot. "First you try to rob me, and now you've drowned my boy."

HANDSOME, charming, intelligent, wealthy, witty, gay, young rake wishes to share his gifted nature and bring as much sunshine as possible into the drab lives of American women. Call 9303 for appointment. References required.

"It's a sad case."

"What is?"

"A dozen empties."

The other day Farmer Brown got his face caught in a corn picker and the doctor had to graft some new skin on it. Well, I don't know where they got the new skin, but it seems every-time when Mr. Brown gets tired, his face wants to sit down.

She was only the lawyer's daughter, but it was easy to break her will.

Hear about the near-sighted snake that eloped with a rope?

Professor: "Are you cheating on this exam?"

A Student: "No, I was just telling Bob that his big nose was dripping on my paper."

Stopping at the first farm house on his famous midnight ride, Paul Revere cried:

"Is your husband at home?"

"Yes!" came back the reply.

"Tell him to get up and defend himself, the British are coming."

At the second, third, and fourth house, it went something like this:

"Is your husband at home?"

"No," came back the reply.

"Whoa!"

Question: "Dear Miss Dix, I am nineteen years old and I stayed out last night until four o'clock. Did I do wrong?"

Answer: "Dear Jane. Try to remember."

Quiet Student: "Something came into my mind just now and went away again."

Bored Roommate: "Perhaps it was lonely!"

The neighbors complained about the noise that Mrs. Jones' husband made.

Finally one asked, "Why does your husband go around cackling like a chicken all the time?"

"Well, I'm not sure," said Mrs. Jones.

"Sometimes we think he's not in his right mind."

"But can't you do something for him, can't you cure him?"

"Oh, I suppose so," answered Mrs. Jones, "but we need the eggs."

H U M O R

Wife — Everytime you see a pretty girl, you seem to forget that you are married.

Husband — On the contrary, my dear, nothing brings home the fact with so much force.

College boy pouring drinks — "Say when"

College girl — "Right after this drink."

Mother (entering room unexpectedly): "Why, I never . . ."

Daughter: "Oh, mother — You must have!"

Famous last words: "Hell, he won't ask us that."

"I love his manners," said Cutie, "and he dresses so well."

"Yes, and so quickly, too," replied her friend.

Mrs. Van Dyke (to street car conductor): "Will I get a shock if I put my foot on the track?"

Conductor: "No ma'am, not unless you put your other foot on the trolley wire."

Boarder: "It's disgraceful, Mrs. Skinner! Why last night two rats were fighting in my room."

Mrs. Skinner: "So what do you expect for \$3 a week, bull fights?"

Bureaucrat to secretary: "Well, if I made a blunder, don't just stand there, label it 'Top Secret' and file it away."

"This university turns out some great men."

"When did you graduate?"

"I didn't graduate, I was turned out."

Then there was the farmer's daughter who went swimming in the raw in a secluded mill pond. A little boy came along and started to tie knots in her clothes. The girl swam around, found an old washtub, held it in front of herself and marched toward the little boy saying, "You little brat, do you know what I'm thinking?"

"Sure," said the little brat, "you think that tub has a bottom to it."

She: "You say it was Bill she really loved. Well, why did she marry the millionaire Harvey?"

Her: "So that she'd have a nice place to invite Bill."

"If it's funny enough to tell, it's been told; if it hasn't been told, it's too clean; and if it's worth reading, the editors get kicked out of school."

Warden — We must set you to work, what can you do?

Forger — Give me a weeks' practice, and I'll sign your checks for you.

Young Man (hopefully) — How about a kiss?

Girl — I have scruples.

Young Man — Oh, that's all right, I've been vaccinated.

The lad lay in the hospital with a broken leg, myriad cuts and bruises. "What happened son," asked the father. "Did you have an accident coming from your girl's place?"

"No," the boy groaned.

"Well, how did it happen?"

"We were jitterbugging," the boy exclaimed, "when her old man came in. He's deaf and couldn't hear the music."

A certain young man once remarked to his girl, "I'll bet you wouldn't marry me?"

The story goes that she not only called his bet but raised him five.

Said the nanny goat to the billy goat:

"You can go as far as you want, tall, dark, and stinky . . . just don't kid me."

Two student cars smashed on the avenue.

"Whatzamatter?" hollered the driver of one. "Ya blind?"

"Blind?" the other muttered. "I hit ya, didn't I?"

"What made you decide to become a paratrooper?" asked the co-ed of the ROTC who had just returned from summer camp. "A plane with three dead engines."

In order to impress the class further concerning microorganisms, the doctor singled out a shy little nurse in the back row.

"Stand up young lady," he ordered. "Now to show how closely you have been following me, I want you to tell the class why is it that there are so many patients in your ward?"

After a timid pause, the little nurse broke up the lecture by replying, "Doctor, I work in the maternity ward."

There are two ways to handle women, but unfortunately nobody knows what they are.—*Pipe Dreams.*



Farming As A Way Of Life

by Dave Bogaisky '60

BEING city bred I find it hard to pin down the exact reasons for my choice of farming as an eventual way of life for me upon graduation from this institution. Two years ago I turned my back on my place of birth, the city, and entered what I term "a new world." This new environment had many a trying time in store for me till I became properly adjusted. Getting acquainted with the meaning of "backpower" and with some of the grueling tasks was quite a pill to swallow, a complete reversal of the picture of farming I had painted in my mind (in the city). Yet, in spite of this, and of such frustrations as being gently kicked into the gutter (a ditch running posterior to bossy into which she excretes) by a contrary cow in response to my inept milking operation, I found myself getting to desire this new life.

"Why do I choose farm life?" I asked myself, and many other times subsequently. In fact I still get around to that point every morning, while staggering sleepily into the cold dawn.

on my way to the dairy barn at my place of employment. Why is farm living so appealing? First, I picture Brooklyn, New York, which is my home town. I see row upon row of stereotyped architecture extending as far as eye can see, countless automobiles belching "pleasant" smells of carbon monoxide, which, combined with essences of factories, garbage incinerators, and next door neighbors, prove "stimulating." I see rows of garbage cans — here a tail poking out signifying the presence of Mr. or Mrs. Alley-Cat, skilled scavenger, and midnight yowler.

On the other hand, there is much that is pleasing in farm living. Partly, the touch of Mother Nature is responsible. Being used to the constant cacophony of the city, I did not take things for granted. I shall never forget the exhilaration that swept over me as I heard, for the first time, the symphony of a summer evening, and viewed the rising and setting of the sun over a misty pasture. Nor shall I forget the first "calving" at which I

was present.

Aside from the aesthetic appeal of the surroundings, I found farm living a satisfying experience — being able to see my actual accomplishments at the end of the day and "looking forward" with anticipation to the next day, something I did not do on a city job.

I have never seen life better enjoyed than by the members of a farm family, running an efficient farmstead. Everyone has a place and a job, and is made to feel important in his or her task, no matter how simple. This, coupled with the constant presence of all members of the farm enterprise and their working together, produces responsible future Americans.

Naturally these feelings have been produced in me by my experiences as a mere farm hand. There is quite a difference between the point of view of a farm laborer and farm owner. Responsibilities and worries constantly plague the farmer. This makes me wonder how well I would fare "on the other side of the fence."

LANDSCAPE DESIGN

(continued from page 12)

have striking shape, color, texture, and an emotional effect. The smaller natural forms, such as brook valleys, variation of ground surface, small ponds, etc., are sometimes very useful in the design.

In determining the esthetic relation of a building to the landscape of which it forms a part, it is important to decide first whether the particular scene is to be considered as expressing the character of a natural landscape, or whether it should express by its style the dominance of man.

The relation of design and maintenance is an important item to consider. Plants of varying speed of growth may thrive together under good maintenance, but otherwise the stronger soon destroy the weaker. Plants may be set out close together for immediate effect, and good effect be later maintained if they are to be thinned at the proper time.

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EDITORIAL

(continued from page 5)

poor"; others, that the quality of the magazine is "great"; and unfortunately, some have said, "The *Gleaner* — who needs it?"

It is a blessing to know that the majority of the students at N. A. C. holds the *Gleaner* in the highest regard, and feels that the magazine is a vital part of college life. To those individuals that do not possess this regard for the magazine or for any other publication, let it be said that they lack something very vital in their understanding and appreciation of the various facets of college life.

Next year, the *Gleaner* will have two new editors heading its staff; Joe Shinn '59 and Hunt Ashby '58. Our sincere best wishes go to these individuals, in the hope that next year will see the *Gleaner* grow into a bigger and better magazine, and exert increasing influence on the campus.

A Short, Short Story

by Ben Suavely '59

IT WAS only 1:15 A.M. as I wheeled my "41" Ford convertible into the one half of the parking space that an elderly lady had kindly left for me. As I was parking my rod, I just couldn't help thinking of the events of the past few days, especially of the little white card that I had just received in the mail this very morning. According to the orders on the card, I was supposed to wait in the side room of the 1st. white house with *red* shutters on the southern side of the square. As I entered the door of what I presumed to be the correct house, I couldn't help but perceive a faint, but undistinguishably different odor. The room was only dimly lit and didn't seem to be much larger than an average-size *dairy* bar. I took my coat off and hung it on the cloak rack that was conveniently located by the door. There was a bench along the opposite wall and as I walked over to sit down I heard a very peculiar sound in the next room. As I sat down, I couldn't help noticing

that my fingers seemed a little shaky, especially when I reached for a magazine that was lying at the opposite end of the bench. Oh well, I thought to myself, you've gone this far so don't chicken out now. I glanced at a few pages of the the magazine but the image entering my brain was completely blank. No matter how hard I tried, I just couldn't concentrate on the magazine; so finally giving it up for a lost cause, I placed it back on the bench. Glancing down at my wrist when I noticed that it was 1:28 P.M.; only two minutes to sit—and wait. At exactly 1:30 P.M., a small door at the side of the room was opened and a silent, white-clothed figure motioned for me to follow him. Shakily I rose to my feet, not knowing whether to run out the other door or do as he beckoned. Somehow I seemed to be completely in his power as I entered the little door, passed down a small hallway, and then entered another door to my left. Without a word he motioned me

to sit down in a peculiar looking chair surrounded with all sizes and shapes of gadgets. By this time I was completely unnerved, not daring to think what might be this man's next move, or even to think of the possible disastrous results that might occur to poor little old me. As I nervously slid into the seat, the man left the room, only to return a few minutes later with a pointed, silver object which was undiscernable to my rapidly blurring eyes. As he raised the silver object I could feel myself falling into a deep semi-consciousness in which I had absolutely no self-control. How long I was unconscious I haven't the slightest idea, but as my head slowly settled back to earth and my eyes gradually cleared, I could see the man in white still standing there. The silver object, however, remained no longer in his hand. Instead in his palm lay a tiny white object — the cause of my recent toothache!!

Agriculture As A Way Of Life

by David L. Kantner '60

AGRICULTURE as a Way of Life," is usually practiced on a family farm.

What is a family farm?

"The family-type farm might generally be considered a farming operation in which managerial decisions are made by the farmer and most of the physical work in the production of the farm enterprise is done by the members of the farm family."

As one of six children from a family farm, let me try to explain why I like "Agriculture as a Way of Life."

As a young boy I can remember going up on the hillside on a warm September day and, ensconced on a clump of Honeysuckle, watching the wind move lazily through our field of newly-shocked corn. Looking down dreamily on the fields you helped to plant and harvest, you gain a certain love and respect for the soil, and for Him above, that makes that soil pos-

sible.

Then you glance over at the barn, and think of that 4-H calf you've worked on continuously for the last two months. And that yearling ewe that's been your pride ever since she won first prize last year at the County Fair — this winter she'll give birth to her first lamb. I can just see myself going out every night 'till midnight and checking on her there. Then that final night arrives when you find a newly-born lamb lying in the corner beside a nervous but proud mother. You help the mother dry the lamb, which is wet and steaming from the cold air. Then, you make sure that the lamb gets warm milk from its mother, and when it's "O.K." you sit and smile at it, with a sense of pride and happiness, as it gains a precarious foot-hold in this new and frightening world.

Let's leave the barn and take a look at the house. Here comes Dad out the door to do the evening chores. He never carries a lunch pail, never punches a time clock, and never works a certain shift. And then there's Mom; she's always home to cook those three square meals a day, and fix those unmanageable heads of hair in the morning. She's also there to greet you, after school, with a glass of milk and a piece of fresh apple pie, baked this afternoon.

To me farm life is the only life. I think farm life teaches you to accept a challenge, to counteract defeat, and to try your best in everything you do. To leave my feeling about farming with you, I will quote a phrase from George Eliot: "No human being can live a wholesome life unless he be rooted to some particular spot of soil."

FARM WOODLAND

(continued from page 9)

Northeast", and was published in June, 1956. The following statistics appearing in this bulletin are based on an intensive study of some 3000 such woodlands in eleven States (New York did not participate in the study), selected by the most modern sampling techniques. Most of these were owned by resident farmers. Thirty-eight percent of the woodlands were very small — only 10 to 29 acres apiece; 83 percent of them were less than 100 acres.

The study substantiated the investigators' general statement that: "The small woodland has long been important as a source of forest products for home use, for fuel, fencing, repairs, and new construction." During the 5-year period, 1947-51, about 60 percent of these farmer-owners made at least one cutting of forest products for home use. The products included sawlogs, fuelwood, posts, poles, and miscellaneous products, and their average value on the stump was \$90 per annum.

About 30 percent of the woodland owners sold timber from their properties in the same 5-year period. The average return per farmer was \$934. In New England about 16 percent of this was received from sales of timber *on the stump*, and in the Middle Atlantic States, about 45 percent. This difference is probably due in part to variations in the type of farming; farm labor may be less available for cutting forest products in the southern part of the Northeast than in New England.

Not every farm woodland in the Northeast today contains merchantable timber, particularly sawtimber. However, among the 70 percent of farmers who did not sell any timber in this particular 5-year period, only about 1/5 reported that they had no products "meeting specifications", or that they found markets "lacking or too distant." Even in managed woodlands, where the intervals between sawtimber cuts average 15 years, only about 33 percent would have such timber available to cut in any 5-year period; this figure compares with the 30 percent of all farmers who actually did sell forest products of some kind (not always sawtimber) from their woodlands.

Annual cuts for home consumption of timber worth \$90 on the stump, or sales every 5 years of stumpage worth \$934, are not insignificant returns to the farmer from a volunteer crop. Furthermore, scientific forestry, like sci-

tific agriculture, is constantly enhancing the value of farm crops. The volume of wood produced per acre of unmanaged woodland in the Northeast can certainly be doubled under forest management, and the quality can be greatly improved. Increasing domestic population, and startling increases in per capita consumption of such forest products as wood pulp, will maintain or enhance the unit values of wood, while improvement in rural roads lessens the relative cost of delivering wood from stump to manufacturing plant, and raises the proportionate return to the timber owner. I am one of those foresters who believe that the farm woodlands of America may in time furnish part of the raw material for substantial exports of lumber and other wood products. There is nothing approaching a world-wide surplus of wood today, and the per capita consumption of wood in all of the most populous countries of the world is far below that of the United States.

The American farmer reaps many benefits besides dollars from his woodlands. He may enjoy hunting and fishing in them. They regularize streamflow and prevent erosion. Increasingly, I believe, their value as windbreaks will be recognized in the Northeast. They offer to harried mankind tranquillity and incomparable beauty at all seasons. They will repay in varied coin the time and thought given them.

ROSES

(continued from page 6)

susceptible to some degree. The fungus causes black irregularly circular spots with a radiating margin (formed of the dark mycelium) on the leaves which may turn yellow and drop off. Not only are the spotting and defoliation unsightly, but also they seriously weaken the plants and make them more susceptible to winter injury. Black Spot can be controlled either by spraying or dusting. The so-called Massey dust, containing lead and sulfur, is excellent. Properly applied—that is, dusted up from underneath through the plant—neither form is unsightly. The important thing in the control of Black Spot is to begin the spraying or dusting program early, soon after the leaves come out, and certainly by the first of May. Bushes should be dusted or sprayed once a week during the growing season until frost.

The several rose cankers are best controlled at the time of uncovering and pruning the plants in the spring.

If a dormant spray of lime-sulphur can be applied before the buds break, it will be most useful. Once a canker has entered the stem, the only positive control is to remove the branch at a point at least three inches below the infection. The bark of the infected area will be brown and shriveled, and there will be a visible hole in the stem.

Roses are attacked by the usual horde of garden insect pests, such as aphids, Japanese beetles, rose chafer, etc., and should be sprayed or dusted periodically to keep these pests in check and hinder their development.

EXODUS

(continued from page 4)

She decided to await his return, since she was at the only exit, he must surely come back this way. And he did. They left for Germany together. Imagine that reunion! That is the one part of the trip neither talk about. They went to Germany to wait until there was room in the quota.

And that is how my mother came to America.

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